Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Canceled)

21. (Currently Amended) The device as claimed in ~~claim 20,~~claim 39, wherein the input electrode is arranged on the ~~ferroelectric material~~second layer.

22. (Currently Amended) The amplifier as claimed in ~~claim 17,~~claim 36, wherein a common electrode is provided between the first layer and the second layer,~~two layers,~~ an input electrode is provided on one of the first layer and the second layer,~~layers~~ and an output electrode is provided on the other of the first layer and the second layer,~~layers,~~ the input and output electrodes being disposed on opposite sides of their respective layers compared with the common electrode.

23. (Currently Amended) The amplifier as claimed in claim 22, wherein the input electrode is arranged on the ~~ferroelectric material~~second layer.

24. (Currently Amended) The transformer as claimed in ~~claim 18,~~claim 37, wherein a common electrode is provided between the first layer and the second layer,~~two layers,~~ an input electrode is provided on one of the first layer and the second layer,~~layers~~ and an output electrode is provided on the other of the first layer and the second layer,~~layers,~~ the input and output electrodes being disposed on opposite sides of their respective layers compared with the common electrode.

25. (Currently Amended) The transformer as claimed in claim 24, wherein the input electrode is arranged on the ~~ferroelectric material~~second layer.

26. (Currently Amended) The inverter as claimed in ~~claim 19,~~claim 38, wherein a common electrode is provided between the first layer and the second layer,~~two layers,~~ an input electrode is provided on one of the first layer and the second layer,~~layers~~ and an output

electrode is provided on the other of the first layer and the second layer, ~~layers,~~ the input and output electrodes being disposed on opposite sides of their respective layers compared with the common electrode.

27. (Currently Amended) The inverter as claimed in claim 26, wherein the input electrode is arranged on the ~~ferroelectric material~~second layer.

28. (Canceled).

29. (Currently Amended) The comparator as claimed in ~~claim 28,~~claim 40, wherein a first input electrode is provided on one of the first layer, the second layer, and the third layer,~~layers~~, a second input electrode is provided on another of the first layer, the second layer, and the third layer,~~layers,~~ a common electrode is provided between the one of the layers and the another of the layers having the input electrodes, and an output electrode is provided on the third layer, the input electrodes being disposed on opposite sides of their respective layers compared with the common electrode.

30. (Currently Amended) The device as claimed in ~~claim 16,~~claim 35, further comprising a further layer of ferroelectric material.

31. (Canceled)

32. (Currently Amended) The method as claimed in ~~claim 31,~~claim 41, wherein the input signal is applied to the ferroelectric material ~~layer~~.

33. (Currently Amended) A method of operating the comparator as claimed in ~~claim 28,~~claim 40, the method comprising:

applying a signal to set the polarization in the ferroelectric second layer to a predetermined direction; and

causing an output signal from the ferroelectric third layer having a magnitude proportional to the sum or the difference of the magnitude of the respective input signals.

34. (Canceled)

35. (New) A device, comprising:

a first layer that includes a piezoelectric material; and

a second layer that includes a ferroelectric material;

the first layer and the second layer being stacked along a direction,

the second layer having a polarization axis along the direction,

one layer of the first layer and the second layer receiving an input signal, and

the other layer of the first layer and the second layer outputting an output signal according to the input signal.

36. (New) The device according to claim 35,

the device functioning as an amplifier.

37. (New) The device according to claim 35,

the device functioning as a transformer.

38. (New) The device according to claim 35,

the device functioning as an inverter.

39. (New) The device according to claim 35, further comprising:

a common electrode that is provided between the first layer and the second layer;

an input electrode; and

an output electrode,

the first layer and the second layer being disposed between the input electrode and the output electrode.

40. (New) A comparator, comprising:

a first layer that includes a piezoelectric material layer;

a second layer that includes a ferroelectric material layer; and

a third layer that includes a ferroelectric material,

the first layer, the second layer, and the third layer being stacked along a direction,

the second layer having a polarization axis along the direction,

one layer of the first layer and the second layer receiving an input signal, and

the other layer of the first layer and the second layer outputting an output signal according to the input signal.

41. (New) A method of operating a device having a first layer that includes a piezoelectric material and a second layer that includes a ferroelectric material, the first layer and the second layer being stacked along a direction, the second layer having a polarization axis along the direction, the method comprising:

inputting an input signal to one layer of the first layer and the second layer; and

outputting an output signal according to the input signal to the other layer of the first layer and the second layer.